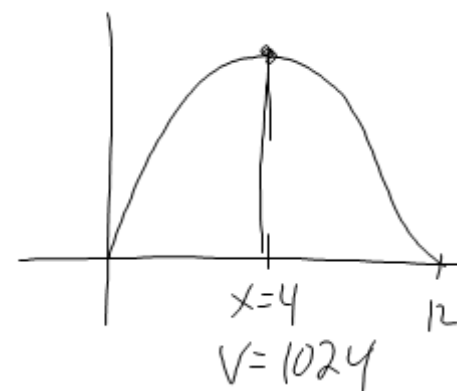
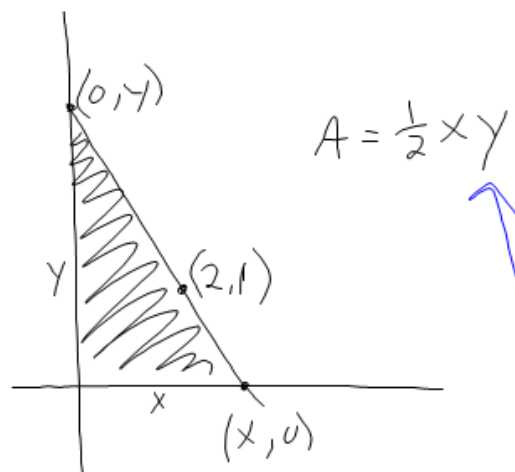


$$V = (x)(24-2x)(24-2x)$$

$$0 < x < 12$$





$$A = \frac{1}{2} \times y$$

$$A = \frac{1}{2} \times \left(\frac{-x}{2-x} \right)$$

Domain

$$2 < x$$

$$\text{All } \mathbb{R} \quad x \neq 2$$

$$\text{slope} = \frac{y-1}{0-2} = \frac{1-0}{2-x}$$

$$\cancel{-2} \frac{y-1}{\cancel{-2}} = \frac{1}{2-x} \cdot \cancel{-2}$$

$$y-1 = \frac{-2}{2-x}$$

+1 +1

$$y = \frac{-2}{2-x} + \frac{2-x}{2-x}$$

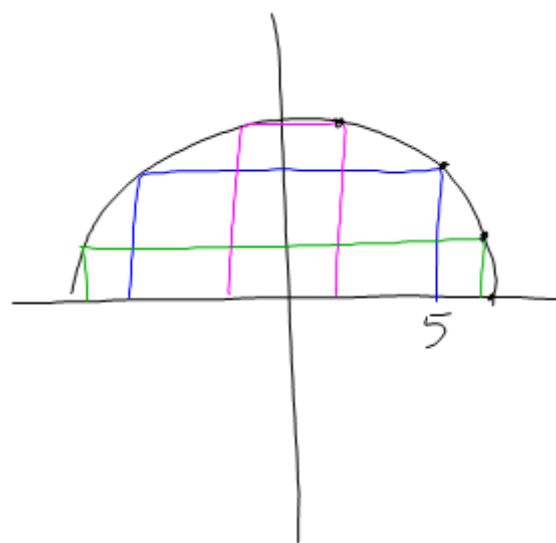
$$y = \frac{-2 + 2 - x}{2-x}$$

$$y = \frac{-x}{2-x}$$

72. Write an Area equation for rect. $A = \frac{2x}{B} \frac{y}{h}$

- find an equation $y = \sqrt{36 - x^2}$

- plug $y =$ equation in for y in Area equation



$$A = 2x(\sqrt{36 - x^2})$$

$$-6 < x < 0 \quad 0 < x < 6$$

$$(-6, 0) \cup (0, 6)$$

And

(73)

- Make a volume equation w/ $x + y$ $V = x^2 y$
- Find another equation with $x + y$ using the number they give you
- Solve for y $y = 108 - 4x$
- plug in for y in volume equation

$$V = x^2(108 - 4x)$$

$$0 < x < 27$$



$$f(x) = 3x - 1$$

$$\frac{f(x+h) - f(x)}{h}$$

$$f(x+h) = 3(x+h) - 1$$

$$f(x+h) = 3x + 3h - 1$$

$$\frac{\cancel{3x} + 3h - 1 - (\cancel{3x} - 1)}{h}$$

$$\frac{3h}{h} = \boxed{3}$$

$$f(x) = x^2 - x + 1$$

$$f(x+h) = (x+h)^2 - (x+h) + 1$$

$$f(x+h) = x^2 + 2xh + h^2 - x - h + 1$$

$$\frac{x^2 + 2xh + h^2 - x - h + 1 - x^2 + x - 1}{h}$$